

DIRECT TESTIMONY
OF
ERIC LOUNSBERRY

Engineering Department
Energy Division
Illinois Commerce Commission

Proposed General Increase in Rates

North Shore Gas Company
Peoples Gas Light and Coke Company

Docket Nos. 07-0241 and 07-0242 (Consolidated)

June 29, 2007

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1 Q. Please state your name and business address.

2 A. My name is Eric Lounsberry and my business address is: Illinois Commerce
3 Commission ("Commission"), 527 East Capitol Avenue, Springfield, Illinois
4 62701.

5 Q. By whom are you employed and in what capacity?

6 A. I am employed by the Commission as the Supervisor of the Gas Section of the
7 Engineering Department of the Energy Division. I have worked for the
8 Commission since 1989.

9 Q. Please state your educational background.

10 A. I received a Bachelor of Science degree in Civil Engineering from the University
11 of Illinois and a Master of Business Administration degree from Sangamon State
12 University (now known as University of Illinois at Springfield).

13 Q. What are your primary responsibilities and duties as the Gas Section Supervisor
14 of the Energy Division's Engineering Department?

15 A. I assign my employees or myself to cases, provide training, and review work
16 products over the various areas of responsibility covered by the Gas Section. In
17 particular, the responsibilities and duties of Gas Section employees include
18 performing studies and analyses dealing with day-to-day and long term,
19 operations and planning for the gas utilities serving Illinois. For example, Gas

20 Section employees review purchased gas adjustment clause reconciliations, rate
21 base additions, levels of natural gas used for working capital, and utility
22 applications for Certificates of Public Convenience and Necessity. They also
23 perform audits of utility gas meter shops.

24 Q. What is the purpose of these proceedings?

25 A. On March 9, 2007, Peoples Gas Light and Coke Company ("Peoples Gas") and
26 North Shore Gas Company ("North Shore") (collectively the "Companies") filed
27 before the Commission their requests for a general increase in their rates.

28 Q. What are your duties and responsibilities associated with this docket?

29 A. My assignment is to review the Companies' requested working capital allowance
30 associated with gas in storage, review certain operations and maintenance
31 expense requests from an engineering perspective, and to review the meter
32 reading practices of Peoples Gas.

33 Q. Are you making any recommendations in this proceeding?

34 A. Yes. I am recommending that the Commission reduce the requested working
35 capital allowance associated with the value of natural gas in storage by
36 \$8,209,000 for Peoples Gas and \$1,481,000 for North Shore. Further, I
37 recommend that the Commission reduce the operation and maintenance
38 expense amounts for Peoples Gas by \$546,000.

39 I am also recommending that the Companies address various areas of concern
40 regarding data inconsistencies with their gas in storage volumes. In addition, I
41 am requesting that Peoples Gas address its current meter reading practices
42 including its procedures when it is unable to obtain an automatic meter reading.

43 Q. Do you have any schedules attached to your testimony?

44 A. Yes. I have the following schedules attached to my testimony:

| | | |
|----|----------------|--|
| 45 | Schedule 11.1P | Peoples Gas Storage Working Capital Adjustment |
| 46 | Schedule 11.2P | Peoples Gas Storage Inventory |
| 47 | Schedule 11.3P | Peoples Gas Historical Inventory Levels |
| 48 | Schedule 11.4P | Peoples Gas Storage Inventory Valuation |
| 49 | Schedule 11.5P | Peoples Gas Schedule F-9 Inventory Levels |
| 50 | Schedule 11.6P | Peoples Gas Remaining Storage Inventory |
| 51 | Schedule 11.1N | North Shore Storage Working Capital Adjustment |
| 52 | Schedule 11.2N | North Shore Storage Inventory |
| 53 | Schedule 11.3N | North Shore Historical Inventory Levels |
| 54 | Schedule 11.4N | North Shore Storage Inventory Valuation |
| 55 | Schedule 11.5N | North Shore Schedule F-9 Inventory Levels |

56 **Working Capital Allowance for Gas in Storage**

57 Q. What amount of working capital allowance did the Companies request to cover
58 the working gas, or top gas, contained in their natural gas storage fields?

59 A. Peoples Gas requested \$86,667,000 and North Shore requested \$10,507,000.

60 Q. Do you agree that the Companies' requested working capital allowances for
61 working gas are reasonable?

62 A. No. I recommend that Peoples Gas reduce its requested amount by \$8,209,000
63 as shown on ICC Staff Exhibit 11.0, Schedule 11.1P, and that North Shore
64 reduce its requested amount by \$1,481,000 as shown on ICC Staff Exhibit 11.0,
65 Schedule 11.1N.

66 Q. What is working gas?

67 A. Working gas, also called top gas, is the volume of gas in a storage reservoir that
68 is cycled (withdrawn during winter months, injected during the non-winter
69 months) from storage. Stated differently, working gas is the gas available in a
70 storage reservoir to meet utility customer's winter demands. The utility replaces
71 the working gas used by the customers during the winter season by injecting gas
72 back into the storage reservoir during the non-winter season.

73 Q. What is base gas?

74 A. Base gas, also called cushion gas, is the volume of gas required in a storage
75 reservoir to provide adequate pressure to cycle the working gas. Base gas is
76 usually broken down into two components, recoverable base gas and non-
77 recoverable base gas. Recoverable base gas is the gas that the company
78 expects to be able to recover from the field when it is retired. The non-
79 recoverable base gas is the gas that the company does not expect to recover

80 from the field when the field is retired.

81 Q. In general, why does a gas utility use storage field supply?

82 A. In the winter months, a gas utility uses storage field supply to meet winter peak
83 demand, while also avoiding the costs associated with contracting for other
84 winter firm supply resources. In addition, a storage field's working gas is
85 comprised of summer injections that are, under most circumstances, less
86 expensive than winter resources. Therefore, there is usually an economic
87 incentive to use storage field gas supplies.

88 **Peoples Gas Working Capital Request**

89 Q. What did Peoples Gas request for a working capital allowance associated with its
90 gas in storage?

91 A. As indicated on its Schedule 285.2005, Schedule B-1, line 6, column F, Peoples
92 Gas requested a working capital allowance of \$86,667,000 associated with its
93 gas in storage.

94 Q. Is the working capital allowance associated with gas in storage related to top gas
95 or base gas?

96 A. The working capital allowance for gas in storage is the 13-month average value
97 of a utility's top gas.

98 Q. How does a utility normally recover its top gas costs?

99 A. The value of a utility's top gas costs are recovered from ratepayers through the
100 purchased gas adjustment ("PGA") rates at the time the gas is withdrawn from
101 the storage fields. However, since the vast majority of storage gas is injected
102 during non-winter months, there is a lag between when a utility injects the gas
103 into a storage field or leased storage service (and pays its supplier for that gas)
104 and when the utility withdraws that gas and receives its payment for the same
105 gas. Therefore, the utility is also allowed a working capital allowance for the
106 value of its top gas in storage.

107 Q. Do you have any concerns regarding Peoples Gas' working capital request
108 associated with its gas in storage?

109 A. Yes, I have six concerns. First, the volume of gas associated with Peoples Gas'
110 request exceeds the gas volumes historically carried by Peoples Gas. Second,
111 the workpapers Peoples Gas provided to support its requested allowance do not
112 show how Peoples Gas determined the indicated volume of gas had a value of
113 \$86,667,000. Third, these same workpapers from a volumetric perspective do
114 not tie into other information provided by Peoples Gas the regarding gas storage
115 volumes. Fourth, information provided about inventory volumes Peoples Gas
116 maintained are inconsistent with the capacities listed for certain storage fields
117 and services¹. Fifth, I am concerned with the overall level of storage since

¹ Storage service refers to a utility leasing a storage field or service from a third party.

118 several of the storage services appear to have limited use during the year.

119 Finally, I am concerned with the changes that Peoples Gas has made regarding
120 the allocation of Manlove storage capacity between the entities that make use of
121 that capacity.

122 **Peoples Gas Historical Storage Volumes**

123 Q. For what volume of stored gas did Peoples Gas request a working capital
124 allowance in the instant proceeding?

125 A. Peoples Gas based the volume of gas for which it requested a working capital
126 allowance on a 13-month average of month ending volumes for the period
127 September 30, 2005 through September 30, 2006 (Fiscal 2006). The data that
128 Peoples Gas provided in response to Staff data request ENG 1.53 indicates that
129 the 13-month average volume was 44,112,942 Dth² as shown on ICC Staff
130 Exhibit 11.0, Schedule 11.2P.

131 Q. How does the volume of gas shown from Schedule 11.2P compare to the same
132 calculation made for prior years?

133 A. The volume of gas for which Peoples Gas requested a working capital allowance
134 in the instant proceeding is much higher than what Peoples Gas has historically
135 maintained in storage. As shown on ICC Staff Exhibit 11.0, Schedule 11.3P, the

² Dth or dekatherm is an energy measure that is equal to the quantity of heat energy which is equivalent to 1,000,000 British therm units. A Dth is roughly equivalent to a Mcf (or 1000 cubic feet) of natural gas.

136 requested storage inventory volume (Fiscal 2006) is on average more than 4
137 Bcf³ higher than the prior 2 years (Fiscal 2005 and 2004) and more than 10 Bcf
138 higher than all of the fiscal years prior to 2004.

139 Q. What caused the more than 10 Bcf difference between the requested value and
140 the historic values prior to Fiscal 2004?

141 A. According to the Peoples Gas response to data request CNE 1.32, in early 2003,
142 Peoples Gas increased the volume of leased storage capacity that it had under
143 contract by about 15 Bcf, from 19.6 Bcf to about 34.875 Bcf. Peoples Gas about
144 10 months later reduced the total leased storage capacity down to 31.5 Bcf,
145 which resulted in an overall increase around 12 Bcf. Therefore, I expect that
146 significant portion of the 10 Bcf difference resulted from the increase in leased
147 storage capacity that Peoples Gas had under contract during the 2003 time
148 period since this increase also allowed Peoples Gas to maintain a higher amount
149 of top gas in storage.

150 Q. Were you able to determine why Peoples Gas needed to increase its leased
151 storage capacity by about 12 Bcf?

152 A. No. Company witness Lawrence T. Borgard indicated in his direct testimony,
153 Peoples Gas Ex. LTB-1.0, page 10, that one of the reasons for Peoples Gas' rate
154 increase request is the continued reduction in the overall level of gas being
155 delivered to its customers and the reduced usage of gas per customer. Further,

³ Bcf is equal to 1,000,000 Mcf or 1,000,000,000 cubic feet.

156 my review of the Commission's Gas Sales Statistic Comparisons for the last 10
157 years show the number of customers that Peoples Gas served has also declined
158 considerably during that time frame. Therefore, it is not obvious to me why
159 Peoples Gas needed to considerably increase its leased storage capacity at a
160 time when its overall delivery amounts and the number of customer served
161 continued to decrease.

162 Q. Did Peoples Gas provide any explanation for why it increased its leased storage
163 capacity by about 12 Bcf?

164 A. No.

165 Q. How does a considerable increase in leased storage capacity impact customer
166 rates in a rate case?

167 A. As noted above, the gas volume comparison between the gas volumes
168 maintained by Peoples Gas for the historical periods shows about a 10 Bcf
169 increase in average gas volume for the test year. In a rate case, a utility is
170 allowed to request a working capital allowance (rate base treatment) for the 13-
171 month average gas volume. Therefore, in general the more leased storage
172 capacity held by a utility, the higher level of working capital allowance it is
173 allowed to request from its customers, which corresponds to higher base rates
174 for those customers.

175 Q. Have you been able to determine the reason for the more than 4 Bcf difference
176 between Peoples Gas' requested gas in storage value and its more recent
177 historic (Fiscal 2004 and 2005) values?

178 A. I am not aware of any reason for the variance.

179 Q. Did Peoples Gas make any storage capacity changes recently?

180 A. Yes. According to the Peoples Gas response to data request CNE 1.32, Peoples
181 Gas increased its ANR leased storage contract capacity by 2.0 Bcf in April 2006.

182 However, Peoples Gas also reduced its allocation to the Manlove storage field.

183 Peoples Gas' Manlove allocation when it was discussed in the Commission's

184 Order in Docket No. 01-0707 (Order dated March 28, 2006, p. 79 and 91)

185 indicated that Peoples Gas stored about 25.5 Bcf of gas for PGA customers.

186 However, Peoples Gas' response to data request Cub-City 1.11 indicates the

187 current allocation to PGA customers was only 24.8 Bcf, a reduction of about .7

188 Bcf.

189 Q. Did Peoples Gas' recent changes to its storage capacities create or impact the 4
190 Bcf variance between the Fiscal 2006 (test year) value and the Fiscal 2004 and
191 2005 values?

192 A. No, I do not believe so. While the timing of Peoples Gas' decision to reduce its
193 Manlove allocation is not fully known at this time, Peoples Gas reduction of its
194 Manlove allocation of .7 Bcf and the increase of 2.0 Bcf for the ANR leased

195 storage service when combined equal an increase of 1.3 Bcf, far less than the
196 13-month average variance of over 4 Bcf. At best, Peoples Gas' inventory
197 capacity changes would somewhat offset each other or may cause a slight
198 increase in inventory levels, but it can not be responsible for a 4 Bcf variance.

199 Further, when I compared the September 2005 and 2006 inventory volumes for
200 the ANR leased storage service (per Peoples Gas' response to Staff data
201 request ENG 1.53), I noted that the inventory values were nearly identical.

202 Therefore, even though Peoples Gas increased the capacity level of the ANR
203 storage service during the 2006 Fiscal Year, there does not appear to be any
204 corresponding increase in that service's inventory through September 2006.

205 Therefore, at this time, I am not aware of any reason for the variance between
206 the test year volume and the volume associated with the two most recent
207 historical years.

208 Q. What is your recommendation regarding this topic?

209 A. Peoples Gas' requested storage inventory volume (Fiscal 2006) is more than 4
210 Bcf higher than the prior 2 years (Fiscal 2005 and 2004) and more than 10 Bcf
211 higher than all of the fiscal years prior to 2004. As explained above, it appears
212 that the additional increase relative to fiscal years prior to 2004 (over 10 Bcf) is
213 attributable to an increase in leased storage capacity in 2003. Peoples Gas, in
214 its rebuttal testimony, needs to (i) confirm and demonstrate that the increase in
215 leased storage capacity in 2003 is in fact the reason for the additional increase in

216 storage inventory volume relative to fiscal years prior to 2004 or (ii) otherwise
217 explain the additional increase in storage inventory volume relative to fiscal years
218 prior to 2004. In addition, with respect to the increase in leased storage capacity
219 held under contract in 2003, Peoples Gas needs to explain why it needed to
220 considerably increase the level of leased storage capacity given the fact that the
221 overall delivery amounts and the number of customers that Peoples Gas served
222 was decreasing during this time period.

223 Since my analysis and review of available information did not disclose a plausible
224 explanation for the more than 4 Bcf increase in test year storage inventory levels
225 over the two most recent historical years, I recommend at this time that the
226 Commission reduce the volume of gas for which Peoples Gas has requested a
227 working capital allowance by 4,178,501 Mcf as shown on ICC Staff Exhibit 11.0,
228 Schedule 11.1P. Schedule 11.1P also indicates this adjustment results in an
229 \$8,209,000 reduction to Peoples Gas' requested working capital level associated
230 with its gas in storage. I reserve the right to make an additional adjustment if
231 Peoples Gas is unable to satisfactorily explain the additional increase relative to
232 all fiscal years prior to 2004 as set forth above.

233 I also recommend that Peoples Gas explain in its rebuttal testimony (i) why its
234 13-month average storage volume increased by 4.2 Bcf of storage volume
235 relative to Fiscal Years 2004 and 2005 and (ii) why it needed to increase its
236 leased storage capacity by 2.0 Bcf in 2006 given the fact that the overall delivery
237 amounts and the number of customers that Peoples Gas served continued to

238 decrease. To the extent that Peoples Gas provides such additional information, I
239 will review it and consider whether it impacts my proposed adjustment.

240 **Peoples Gas Workpapers do not Support Requested Level**

241 Q. Have you attempted to verify Peoples Gas' valuation of the gas in storage
242 allowance it requested?

243 A. Yes. Peoples Gas' response to Staff data request ENG 1.53 provides detail
244 regarding the working gas inventory at Peoples Gas' Manlove storage field as
245 well as details about each of its leased storage services.

246 Q. Does this document tie the valuation and inventory volumes associated with
247 Peoples Gas working gas together?

248 A. Partially, but not completely. The information from the Peoples Gas' response to
249 Staff data request ENG 1.53 provides information that corresponds to the values
250 Peoples Gas assigned to working gas (from WPB-8.1.1, page 4 of 4) for four
251 months (September, October, November 2005, and September 2006), but it does
252 not correspond to the valuation Peoples Gas assigned to the other 9 months.

253 Q. How much variance is there in the values for working gas numbers?

254 A. Peoples Gas request is for \$86,667,000, but the valuation numbers from Peoples
255 Gas response to Staff data request ENG 1.53 show a 13-month average

256 valuation of \$39,252,000 as shown on ICC Staff Exhibit 11.4P, a difference of
257 over \$47,000,000.

258 Q. Why is the difference in the storage inventory values important?

259 A. Aside from needing to base the rates upon the most accurate information
260 available, the storage gas inventory volumes are used as the starting point for
261 assigning the value for any adjustment that I make to Peoples Gas' requested
262 inventory levels and ultimately impact the overall rates charged by Peoples Gas.

263 Q. What is your recommendation on this topic?

264 A. Peoples Gas should either provide rebuttal testimony or supplement the
265 response to Staff data request ENG 1.53 to demonstrate in detail how it
266 calculated the values from its Workpaper WPB-8.1.1 for the test year and explain
267 why there is such a large difference between its requested value and the values
268 provided in its response to Staff data request ENG 1.53.

269 Q. Are you making any adjustments to Peoples Gas' requested working capital
270 allowance as a result of this issue?

271 A. Not at this time. However, I do reserve the right to make further adjustments to
272 Peoples Gas' requested working capital allowance for gas in storage in my
273 rebuttal testimony on this issue.

274 **Peoples Gas Storage Inventory Levels Variance**

275 Q. Have you encountered any variances in other information regarding Peoples
276 Gas' storage fields?

277 A. Yes. As shown on ICC Staff Exhibit 11.0, Schedule 11.5P, taking the information
278 that Peoples Gas provided in Section 285.6305, Schedule F-9, Pages 1 through
279 6, and comparing it to the information provided in response to various data
280 request responses from Peoples Gas concerning storage, specifically, Staff data
281 request ENG 1.53 and to data request CNE 1.32, shows the individual data
282 request responses are consistent with each other, but the information provided in
283 Schedule F-9 is not consistent with the data request responses.

284 Q. How much variance is there between the Schedule F-9 information and the
285 information that Peoples Gas has provided in response to the various data
286 requests?

287 A. The Schedule F-9 information shows a test year 13-month average gas storage
288 volume of 43,852,077 Mcf as shown on ICC Staff Exhibit 11.0, Schedule 11.5P.
289 The information from the data request responses shows a 13-month average
290 volume gas storage volume of 44,112,942 Dth which is 260,865 more than the
291 Schedule F-9 data indicates as shown on ICC Staff Exhibit 11.0, Schedule 11.5P.

292 Q. Which 13-month average did you assume Peoples Gas relied upon when it
293 requested an increase in rates?

294 A. I assumed Peoples Gas used the storage inventory volumes that it provided in
295 response to the various data request.

296 Q. Why is the difference in the storage inventory volume important?

297 A. Aside from needing to base the rates upon the most accurate information
298 available, the storage gas inventory volume amounts play a key role in
299 determining the value and amounts for any adjustment that I make to Peoples
300 Gas' requested inventory levels and ultimately impact the overall rates charged
301 by Peoples Gas.

302 Q. What do you recommend that Peoples Gas do to address your concerns?

303 A. Peoples Gas rebuttal testimony should provide an explanation for why there are
304 inconsistencies between the various sets of data. If there are any errors in any of
305 the data provided in the filing or in response to various data requests, Peoples
306 Gas should provide the corrected information.

307 Q. Are you making any adjustments to Peoples Gas' requested working capital
308 allowance as a result of this issue?

309 A. Not at this time. However, I do reserve the right to make further adjustments to
310 Peoples Gas' requested working capital allowance for gas in storage in my
311 rebuttal testimony on this issue.

312 **Peoples Gas Storage Volumes Exceed Total Allotment**

313 Q. Do you have any other concerns with the information that Peoples Gas has
314 provided regarding its storage levels?

315 A. Yes. Peoples Gas indicated in its response to CUB-City data request 1.11, that it
316 uses storage to meet the needs of its customers in aggregate and the amount
317 capacity that Peoples Gas allocated from its owned storage capacity is about
318 24.8 Bcf. The only Peoples Gas owned storage facility is the Manlove storage
319 field. However, a review of the specific information for inventory volumes at the
320 Manlove Storage Field, provided in response to Staff data request ENG 1.53,
321 indicates that for three of the months reported, (October and November 2005,
322 and September 2006) the 24.8 Bcf allocation to Peoples Gas was exceeded.
323 Stated differently, Peoples Gas had more gas in Manlove Storage Field inventory
324 than the volume allocated to Peoples Gas. This is also shown on ICC Staff
325 Exhibit 11.0, Schedule 11.6P.

326 Further, Peoples Gas' response to data request CNE 1.32 indicates that its
327 leased storage capacity at its ANR storage service was 8 Bcf until it increased its
328 contractual levels to 10 Bcf in April 2006. However, Peoples Gas' response to
329 Staff data request ENG 1.53 showed the ANR leased storage service had in
330 excess of 8 Bcf at that service in October 2005 (approximately 8.6 Bcf). Again,
331 Peoples Gas' inventory at ANR leased storage exceeded the contractual volume

332 of gas allocated to Peoples Gas. This is also shown on ICC Staff Exhibit 11.0,
333 Schedule 11.6P.

334 Q. How does Peoples Gas injecting too much gas into storage impact rate payers in
335 the instant proceeding?

336 A. Peoples Gas' requested return on its storage inventory is based upon actual
337 month ending levels. Since this data shows Peoples Gas has exceeded the
338 maximum inventory levels on multiple occasions, it means there is additional
339 inventory included within Peoples Gas' request. Further, if the information
340 regarding inventory storage levels is in error, then the valuation of that inventory
341 may also be overstated. If the inventory is overstated, then Peoples Gas'
342 requested rates are also overstated.

343 Q. What do you recommend regarding this issue?

344 A. Peoples Gas needs to provide rebuttal testimony that explains why those months
345 identified above have gas volumes that exceed the stated maximum inventory
346 levels. Peoples Gas should fully explain what arrangements were made for this
347 to occur and what costs (penalties, etc.) were incurred as a result.

348 Q. Are you making any adjustments to Peoples Gas' requested working capital
349 allowance as a result of this issue?

350 A. Not at this time. However, I do reserve the right to make further adjustments to
351 Peoples Gas' requested working capital allowance for gas in storage in my
352 rebuttal testimony on this issue.

353 **Peoples Gas Storage Usage Rates**

354 Q. Aside from the areas of concern you had with Peoples Gas' working capital
355 allowance for gas in storage, did your review reveal any other areas of concern?

356 A. Yes. A review of the percentage of gas removed from the various storage fields
357 and services shows that the percentage of gas removed from two of the leased
358 storage services was fairly low.

359 Q. What percentage of gas did Peoples Gas maintain at some of its leased storage
360 services?

361 A. As shown on ICC Staff Exhibit 11.0, Schedule 11.6P, Peoples Gas maintained, in
362 month ending inventory volume, at least 71% of it gas at the NSS storage service
363 and at least 49% of its gas in the ANR storage service.

364 Q. Why is Peoples Gas low percentage usage of the leased storage services a
365 concern to you?

366 A. There are a couple of reasons it is a concern to me. First, Peoples Gas indicates
367 on Section 285.6300, Schedule F-8, page 1 of 2, column H, that the purpose of
368 all of its owned and leased storage services are to provide peak deliverability,

369 base loading, and system balancing. However, when there is such a low
370 percentage of usage at some of the fields, it calls into question whether those
371 stated purposes are being achieved.

372 Second, if Peoples Gas is unable to withdraw its gas from storage, it could be an
373 indication that Peoples Gas is carrying too much leased storage service capacity
374 for rate payer use. If Peoples Gas is carrying too much leased storage capacity,
375 its requested rates are likely overstated as well.

376 Q. What is your recommendation on this issue?

377 A. Peoples Gas needs to provide rebuttal testimony that explains why some of its
378 storage services have extremely low usage rates and how those low usage rates
379 are beneficial to ratepayers.

380 Q. Are you making any adjustments to Peoples Gas' requested working capital
381 allowance as a result of this issue?

382 A. Not at this time. However, I do reserve the right to make further adjustments to
383 Peoples Gas' requested working capital allowance for gas in storage in my
384 rebuttal testimony on this issue.

385 **Peoples Gas Storage Allocation**

386 Q. Has Peoples Gas changed any of its storage allocation amounts for its Manlove
387 field or leased storage services?

388 A. Yes. Peoples Gas has altered its allocation to the Manlove storage field as well
389 as released about 4.8 Bcf of its NGPL-NSS leased storage service capacity.
390 Regarding the Manlove allocation the Commission's Order in Docket No. 01-
391 0707 (Order dated March 28, 2006, p. 79 and 91), indicates that Peoples Gas
392 stored about 25.5 Bcf of gas for PGA customers at Manlove. However, Peoples
393 Gas' response to data request Cub-City 1.11 indicates the current allocation to
394 PGA customers was only 24.8 Bcf, a difference of about .7 Bcf. However, the
395 allocation of Manlove capacity available to FERC operating statement services
396 (aka Hub⁴) was raised from 8 Bcf to 10.2 Bcf over the same time period.

397 Peoples Gas also indicated in its response to data request VES 2.02 that it has
398 released 4.8 Bcf of NGPL-NSS capacity to Merrill Lynch through April 30, 2013.

399 Q. When Peoples Gas reduced its allocation of working inventory at Manlove, did it
400 reduce any of its other costs associated with Manlove?

401 A. No, not to the best of my knowledge. As is discussed in Mr. Dennis Anderson's
402 Direct Testimony, ICC Staff Exhibit 10.0, Peoples Gas has not directly assigned
403 any recoverable or non-recoverable base gas to the Hub and it is not clear if
404 Peoples Gas is allocating any of the various fixed and variable costs associated
405 with the Manlove storage field and other utility assets. If Peoples Gas is not

⁴ Hub is the name given to describe supply services provided by Peoples Gas to various third parties under rates not approved by the Commission by using its gas system assets. Hub services are a market or supply area pooling/delivery point where gas supply transactions occur that facilitate the movement of gas between interstate pipelines.

406 properly allocating the various costs being incurred by the Hub, then Peoples
407 Gas' customers are likely subsidizing the operation of the Hub.

408 Q. What is your concern with Peoples Gas' decision to reduce the allocation of
409 Manlove storage capacity to ratepayers?

410 A. I am unable to determine a legitimate reason for Peoples Gas to increase its
411 leased storage capacity volumes while at the same time reducing its own
412 allocation of Manlove storage capacity in favor of the Hub.

413 Q. When Peoples Gas released 4.8 Bcf of its NGPL-NSS storage service capacity
414 to Merrill Lynch through April 30, 2013, did it reduce its test year storage
415 amounts associated with this storage service?

416 A. I do not know.

417 Q. What is your recommendation on the issue of Peoples Gas reducing its Manlove
418 storage allocation as well as the release of NGPL-NSS capacity?

419 A. Peoples Gas needs to provide rebuttal testimony that explains why and how it
420 reached the decision to increase its leased storage levels while at the same time
421 reducing its Manlove storage field allocation. Peoples Gas should also explain
422 how it determines the amount of Manlove capacity it allocates between itself and
423 other parties and why the reduction in Manlove storage field allocation to Peoples
424 Gas and the corresponding allocation increase to the Hub did not involve
425 additional costs being allocated to the Hub.

426 Regarding the NGPL-NSS storage service, Peoples Gas needs to provide
427 rebuttal testimony regarding how it reached the decision to release this capacity
428 and the amount selected. Peoples Gas should also explain if its storage
429 inventory levels that it based its working capital request upon included any gas
430 amounts that would be impacted by the release of the NGPL-NSS service
431 capacity and if there was an impact, then provide details about what impact the
432 release of 4.8 Bcf of that storage service would have on working inventory levels
433 for the test year.

434 Q. Are you making any adjustments to Peoples Gas' requested working capital
435 allowance as a result of this issue?

436 A. Not at this time. However, I do reserve the right to make further adjustments to
437 Peoples Gas' requested working capital allowance for gas in storage or other
438 storage related topics in my rebuttal testimony on this issue.

439 **North Shore Working Capital Request**

440 Q. What did North Shore request for a working capital allowance associated with its
441 gas in storage?

442 A. As indicated on Schedule 285.2005, Schedule B-1, line 6, column F, North Shore
443 requested a working capital allowance of \$10,507,000 associated with its gas in
444 storage.

445 Q. What concerns do you have regarding North Shore's working capital request
446 associated with gas in storage?

447 A. I have four concerns. First, the volume of gas associated with North Shore's
448 request exceeds the gas volumes historically carried by North Shore. Second,
449 the workpapers North Shore provided to support its requested amount did not
450 show how it determined the indicated volume of gas had a value of \$10,507,000.
451 Third, these same workpapers from a volumetric perspective do not tie into other
452 information provided by the company regarding gas storage volumes. Finally,
453 information provided about inventory volumes North Shore maintained at
454 Manlove are inconsistent with the capacity listed for that service.

455 **North Shore Historical Storage Volumes**

456 Q. What volume of storage gas did North Shore use in connection with its request
457 for a working capital allowance in the instant proceeding?

458 A. The volume of gas for which North Shore Gas requested a working capital
459 allowance is based upon a 13-month average of month ending volumes for the
460 period September 30, 2005 through September 30, 2006 (Fiscal 2006). Using
461 the data that North Shore provided in response to Staff data request ENG 3.36,
462 the 13-month average volume was 6,399,318 Dth as shown on ICC Staff Exhibit
463 11.0, Schedule 11.2N.

464 Q. How does the volume of gas shown from Schedule 11.2N compare to the same
465 calculation made for prior years?

466 A. The volume of gas for which North Shore requested a working capital allowance
467 in the instant proceeding is higher than what North Shore has historically
468 maintained in storage over the prior 4 fiscal years. As shown on ICC Staff
469 Exhibit 11.0, Schedule 11.1N, the current rate case volume is about 900,000 Mcf
470 higher than the inventory from the prior 4 year period.

471 Q. What caused the 900,000 Mcf difference between the requested value and the
472 more recent historic values?

473 A. I do not know.

474 Q. Has North Shore altered any of its leased storage services recently?

475 A. Yes. According to the North Shore's response to data request CNE 1.31, North
476 Shore increased its NGPL-DSS leased storage contract capacity by 500,000 Mcf
477 in May 2004.

478 Q. Did North Shore's decision to increase its NGPL-DSS leased storage capacity by
479 500,000 Mcf in May 2004 create or impact the 900,000 Mcf variance between the
480 Fiscal 2006 (test year) value and the prior 4 fiscal years' values?

481 A. No. Aside from the test year, none of the other historical periods that included
482 inventory values from the NGPL-DSS leased storage service after May 2004

483 showed a significant increase. Since none of the prior periods showed any
484 significant increases, I do not consider North Shore's increased NGPL-DSS
485 storage capacity as the reason for a 900,000 Mcf variance between the test year
486 and prior periods.

487 Q. How does an increase in leased storage capacity impact customer rates in a rate
488 case?

489 A. As noted above, the gas volume comparison between the gas volumes
490 maintained by North Shore for the historical periods shows about a 900,000 Mcf
491 increase in average gas volume for the test year. In a rate case, a utility is
492 allowed to request a working capital allowance (rate base treatment) for the 13-
493 month average gas volume. Therefore, in general the more leased storage
494 capacity held by a utility, the higher level of working capital allowance it is
495 allowed to request from its customers, which corresponds to higher base rates
496 for those customers.

497 Q. What is your recommendation regarding this topic?

498 A. Since I am unable to determine why North Shore's storage inventory levels
499 exceeded its historical levels, I recommend at this time that the Commission
500 reduce the volume of gas that North Shore has requested by 902,271 Mcf as
501 shown on ICC Staff Exhibit 11.0, Schedule 11.1N. Schedule 11.1N also
502 indicates this adjustment results in a \$1,481,000 reduction to North Shore's
503 requested working capital level associated with its gas in storage.

504 **North Shore Workpapers do not Support Requested Level**

505 Q. Have you attempted to verify North Shore's valuation of the gas in storage
506 allowance it requested?

507 A. Yes. North Shore's response to Staff data request ENG 3.36 provides detail
508 regarding the working gas inventory at each storage field or leased storage
509 service.

510 Q. Does this document tie the valuation and inventory volumes associated with
511 North Shore's working gas together?

512 A. Partially, but not completely. The information from North Shore's response to
513 Staff data request ENG 3.36 provides information that corresponds to the values
514 North Shore assigned to the value of working gas (Section 285.2075, Schedule
515 B-8.1) for four of the months (September, October, November 2005, and
516 September 2006), but it does not correspond to the valuation assigned to the
517 other 9 months.

518 Q. How much variance is there in the values for working gas numbers?

519 A. North Shore's request is for 10,507,000, but the valuation numbers from North
520 Shore's response to Staff data request ENG 3.36 show a 13-month average
521 valuation of a negative \$3,985,000 as shown on ICC Staff Exhibit 11.4N, a
522 difference of almost \$15,000,000.

523 Q. Why is the difference in the storage inventory values important?

524 A. Aside from needing to base the rates upon the most accurate information
525 available, the storage gas inventory volumes are used as the starting point for
526 assigning the value for any adjustment that I make to North Shore's requested
527 inventory levels and ultimately impact the overall rates charged by North Shore.

528 Q. What is your recommendation on this topic?

529 A. North Shore should either provide rebuttal testimony or supplement the response
530 to Staff data request ENG 3.36 to show additional detail showing regarding how
531 the values from Schedule B-8.1 for the test year were determined and calculated.

532 Q. Are you making any adjustments to North Shore's requested working capital
533 allowance as a result of this issue?

534 A. Not at this time. However, I do reserve the right to make further adjustments to
535 North Shore's requested working capital allowance for gas in storage in my
536 rebuttal testimony on this issue.

537 **North Shore Storage Inventory Levels Variance**

538 Q. Have you encountered any variances in other information regarding North
539 Shore's storage fields?

540 A. Yes. As shown on ICC Staff Exhibit 11.0, Schedule 11.5N, taking the information
541 that North Shore provided in Section 285.6305, Schedule F-9, Page 1 through 6,

542 and comparing it to the information provided in response to various data request
543 responses from North Shore concerning storage, specifically, Staff data request
544 ENG 3.36 and data request CNE 1.31, show the individual data request
545 responses are consistent with each other, but the information provided in
546 Schedule F-9 is not consistent with the data request responses.

547 Q. How much variance is there between the Schedule F-9 information and the
548 information that North Shore has provided in response to the various data
549 requests?

550 A. The Schedule F-9 information shows a test year 13-month average gas storage
551 volume of 6,312,000 Mcf as shown on ICC Staff Exhibit 11.5N. The information
552 from the data request responses shows a 13-month average volume gas storage
553 volume of 6,399,818 Dth which is 87,318 more than the Schedule F-9 data
554 indicates.

555 Q. Which 13-month average did you assume North Shore relied upon when it
556 requested an increase in rates?

557 A. I assumed North Shore used the storage inventory volumes that it provided in
558 response to the various data request.

559 Q. Why is the difference in the storage inventory volume important?

560 A. Aside from needing to base the rates upon the most accurate information
561 available, the storage gas inventory amounts play a key role in determining the
562 value and amounts for any adjustment that I make to North Shore's requested

563 inventory levels and ultimately impact the overall rates charged by North Shore.

564 Q. What do you recommend that North Shore do to address your concerns?

565 A. North Shore's rebuttal testimony should provide an explanation for why there are
566 inconsistencies between the various sets of data and if there are any errors in
567 any of the data provided in the filing or in response to various data requests,
568 North Shore should provide the corrected information.

569 Q. Are you making any adjustments to North Shore's requested working capital
570 allowance as a result of this issue?

571 A. Not at this time. However, I do reserve the right to make further adjustments to
572 North Shore's requested working capital allowance for gas in storage in my
573 rebuttal testimony on this issue.

574 **North Shore Storage Volumes Exceed Total Allotment**

575 Q. Do you have any other concerns with the information that North Shore has
576 provided regarding its storage levels?

577 A. Yes. North Shore indicated in its response to data request CUB-City 1.11, that it
578 uses storage to meet the needs of its customers in aggregate and the amount
579 the capacity that is allocated from the Manlove storage field to North Shore is 1.6
580 Bcf. However, a review of the specific information for inventory volumes at the
581 Manlove Storage Field, provided in response to Staff data request ENG 3.36,
582 indicates that in November 2005, North Shore's Manlove storage allocation of 1.6

583 Bcf was exceeded. Stated differently, North Shore had more gas in inventory
584 then the volume allocated to it.

585 Q. How does North Shore injecting too much gas into storage impact rate payers in
586 the instant proceeding?

587 A. North Shore' requested return on its storage inventory is based upon actual
588 month ending levels. Since this data shows North Shore exceeded the maximum
589 inventory level for at least one month, it means there is additional inventory
590 included within North Shore's request. Further, if the information regarding
591 inventory storage levels is in error, then the valuation of that inventory may also
592 be overstated. If the inventory is overstated, then North Shore's requested rates
593 are also overstated.

594 Q. What do you recommend regarding this issue?

595 A. North Shore needs to provide rebuttal testimony that explains why the November
596 2005 gas volume that exceed the stated maximum inventory level. North Shore
597 should fully explain what arrangements were made for this to occur and what
598 costs (penalties, etc.) were incurred as a result.

599 Q. Are you making any adjustments to North Shore's requested working capital
600 allowance as a result of this issue?

601 A. Not at this time. However, I do reserve the right to make further adjustments to
602 North Shore's requested working capital allowance for gas in storage in my
603 rebuttal testimony on this issue.

604 **Operation and Maintenance Issue for Peoples Gas**

605 Q. Do you have any concerns regarding Peoples Gas' operations and maintenance
606 expense request associated with these proceedings?

607 A. Yes. My review indicates that Peoples Gas incurred a non-recurring expense
608 associated with a major repair with its large natural gas compressors during the
609 test year.

610 Q. What occurred to Peoples Gas' compressor during the 2006 test year?

611 A. Company witness Linda Kallas' direct testimony, Peoples Gas Ex. LK-1.0, page
612 13, indicates that there was a bearing failure in a large natural gas compressor
613 that damaged that compressor's crankshaft.

614 Q. How frequently has Peoples Gas experienced this sort of failure in the past?

615 A. Peoples Gas' response to Staff data request ENG 6.06 indicates that before the
616 repair of the crankshaft, the expected life of the gas compressor was virtually
617 indefinite and was limited only by the ability to obtain replacement parts and the
618 avoidance of a catastrophic failure that would make repair impractical or
619 impossible. This same response also indicated that Peoples Gas, over the past

620 20 years, has not experienced a major repair whose magnitude was similar to the
621 crankshaft repair that took place in 2006.

622 Q. Does Peoples Gas expect to make similar repairs in the foreseeable future?

623 A. No. Peoples Gas indicated in its response to Staff data request ENG 6.07 that it
624 does not expect to incur major repairs with its large gas compressors, similar to
625 the identified crankshaft failure, in the foreseeable future. The response also
626 indicated that the Gas Machinery Research Council (“GMRC”) had issued a
627 technical report titled “Crankshaft Protection: Guidelines for Operators of Slow
628 Speed Integral Engine/Compressors” that investigated all types of crankshaft
629 failures. The GMRC report indicated that approximate average probability of
630 incurring a fractured crankshaft is 0.00098 per year. Peoples Gas’ response
631 then indicated that applying that rate to its 6 compressors would show an
632 expected frequency of crankshaft failure of once in 170 years.

633 Finally, Peoples Gas’ response indicated that it had installed electronic bearing
634 temperature sensors in its two largest compressors. These two compressors are
635 now programmed to automatically shut-down if the bearing temperatures exceed
636 specified limits. Peoples Gas indicated that these sensors should even further
637 reduce the likelihood of re-occurrence of the same type of failure.

638 Q. What is your recommendation on this issue?

639 A. Given the extremely low likelihood of reoccurrence of the cost of a compressor
640 failure, I recommend that the Commission consider Peoples Gas' repair of its
641 large natural gas compressor as a non-recurring expense and remove the
642 \$546,000 repair cost associated with compressor repair from Peoples Gas'
643 requested increase.

644 **Peoples Gas Metering Issues**

645 Q. What are your concerns with Peoples Gas metering activities?

646 A. Peoples Gas has a significant number of long-term consecutively unread meters
647 and well as a significant number of automatic meter reading units that are not
648 operational.

649 **Meter Readings**

650 Q. What are the Commission's standards for the frequency with which utilities must
651 conduct a meter reading?

652 A. Section 280.80 Estimated Bills (83 Ill. Adm. Code 280.80) indicates the following:

653 a) All utilities shall make an actual meter reading at least every
654 second billing period, and no utility may consecutively estimate a
655 customer's service usage unless:

656
657 1) the procedure used by the utility to calculate estimated bills
658 has been approved by the Commission; and

659 2) the word "estimate" appears prominently on the face of the
660 bill, in a manner previously approved by the Commission.
661

- 662 b) Notwithstanding the provisions of subsection (a) of this Section, the
663 utility may render an estimated bill for any billing period in which:
664
665 1) the utility has taken appropriate and reasonable measures to
666 read the meter, including but not limited to, making an
667 appointment with the customer, scheduling readings for
668 times other than normal business hours, and/or providing
669 postal cards on which the customer may record the reading
670 and mail it to the utility; or
671
672 2) the customer may knowingly and willfully denied reasonable
673 access to the utility's representative for the purpose of taking
674 an actual reading of the meter; or
675
676 3) the customer has otherwise made an actual reading of the
677 meter unnecessarily difficult; or
678
679 4) circumstances beyond the control of the utility make an
680 actual reading of the meter extremely difficult.

681 Q. Does Peoples Gas have any meters that have not received an actual reading for
682 a considerable amount of time?

683 A. Yes. Peoples Gas response to Staff data request ENG 1.43 (data extract taken
684 as of April 29, 2007) indicates that there are about 5,794 unerted meters and
685 2,878 erted meters that Peoples Gas was unable to obtain an actual meter
686 reading for a period longer than six months, with the longest delay being a meter
687 that has not had an actual reading for 134 months (about 11 years, 2 months).

688 Q. What are erted and unerted meters?

689 A. An ert refers to one type of device that is attached to a meter to allow for remote
690 reading (aka automatic meter reading ("AMR")) of a meter's measured usage.
691 Peoples Gas primarily makes use of an ert when it remote reads a meter. A

692 unerted meter refers to a meter that has to be read manually in order to obtain its
693 measured usage.

694 Q. Is the data that Peoples Gas provided from April 29, 2007 an improvement over
695 prior periods?

696 A. Yes. Peoples Gas response to Staff data request ENG 1.43, (data extract taken
697 as of September 6, 2006) indicated that there were 10,272 unerted and 2,968
698 erted meters that Peoples Gas was unable to obtain an actual meter reading for
699 a period longer than six months, with the longest delay being a meter that had
700 not had an actual reading for 148 months (about 12 years, 4 months).

701 Q. Is Peoples Gas attempting to address the issue of unread meters?

702 A. According to Peoples Gas, yes. Peoples Gas' response to Staff data request
703 ENG 6.01 indicated that has been using a four phase letter campaign to solicit
704 customer appointments for service on meters that cannot be read. Peoples Gas'
705 response also indicated that its program has been effective since there was an
706 almost 35% reduction in consecutively estimated accounts between September
707 30, 2006 and April 29, 2007.

708 Q. Do you agree that Peoples Gas' program has been effective?

709 A. No. I do agree the program has caused a reduction in the number of meters that
710 have not been consecutively read for a significant amount of time, but I can not
711 call a program that currently includes more than 8,500 meters that have not been

712 read for a period of at least six months, including a meter without an actual read
713 for more than 11 years, as effective.

714 Q. What do you recommend Peoples Gas provide to address your concerns on this
715 issue?

716 A. Peoples Gas' rebuttal testimony should provide the most up-to-date summary of
717 consecutively unread meters (erted and unerted) as well as a discussion about
718 when it began its four phase letter campaign to solicit customer appointments for
719 service on meters that cannot be read and how this campaign will resolve the
720 issue of the unread meters.

721 Peoples Gas should also explain if it is making use of its right to discontinue
722 service (ILL C. C. No. 27, Third Revised Sheet No. 30 "Right to Refuse or
723 Discontinue Service") when the customer fails to allow Peoples Gas or its
724 authorized agent access to the customer's premises for purposes of inspecting
725 metering equipment. If Peoples is not making use of its right to discontinue
726 service, it needs to explain why.

727 Finally, Peoples Gas should provide (i) a list of reasons/causes for meters not
728 being read for six months or longer, (ii) the relative number or percentage of the
729 8,500 unread meters falling under each reason/cause, and (iii) the actions being
730 taken to address each reason/cause.

731 **ERT Devices**

732 Q. Do you have any other concerns with Peoples Gas meter reading information?

733 A. Yes. Peoples Gas indicated in response to Staff data request ENG 1.41 that it
734 conducts monthly reads of all erted meters. Peoples Gas then indicated in
735 response to Staff data request ENG 1.42 that it notifies customers by letter to
736 schedule service appointments when ert enable meters are not read for more
737 than 6 consecutive months.

738 Q. Why does Peoples Gas wait 6 months before addressing problems with ert
739 enabled meters?

740 A. Peoples Gas indicated in response to Staff data request ENG 4.13, that it
741 experiences a success rate of greater than 98% in reading meters equipped with
742 an ert device, but there are many reasons why less than 2% of ert equipped
743 meters can not be read in a given month. Those reasons included radio signal
744 interference, structural building construction, expertise of the AMR van operator,
745 and finally the failure of the ert device. Peoples Gas finally indicated that 6
746 months was sufficient time to rule out the other causes for the missing reads
747 before requesting a service appointment to replace the suspect ert device.

748 Q. Do you agree with Peoples Gas' reasoning for waiting 6 months before beginning
749 the process to request a service appointment to replace a suspect ert device?

750 A. No. I fail to see why Peoples Gas needs to wait for that long of a period. I would
751 expect a period of 2 or 3 months would be sufficient to determine whether or not
752 Peoples Gas can obtain a reading from the ert device. Further, I would expect
753 that the amount of time it would take for Peoples Gas to issue the letter, for the
754 customer to respond to the letter, and to determine a convenient time for both
755 parties to schedule the service appointment another month could easily pass,
756 providing Peoples Gas one last attempt before having to physically address the
757 issue.

758 Q. What do you recommend Peoples Gas provide to address your concerns on this
759 issue?

760 A. Peoples Gas' rebuttal testimony should explain why it cannot shorten the amount
761 of time it needs to wait prior to addressing potential ert device problems.

762 Q. Does this conclude your direct testimony?

763 A. Yes.

Peoples Gas Storage Working Capital Adjustment

| | | |
|---|----------------------------------|--------------|
| 1 | Requested Storage Volume | 44,112,942 |
| 2 | Requested Storage Value | \$86,667,000 |
| 3 | Price per Dth for Storage | \$1.96 |
| 4 | 2-Year Historical Average Volume | 39,934,441 |
| 5 | Volume Difference | 4,178,501 |
| 6 | Adjustment | \$8,209,340 |

Row 1 = ICC Staff Exhibit 11.0, Schedule 11.2P

Row 2 = Schedule 285.2005, Schedule B-1, Line 6, Column F

Row 3 = Row 2 / Row 1

Row 4 = ICC Staff Exhibit 11.0, Schedule 11.3P

Row 5 = Row 1 - Row 4

Row 6 = Row 5 * Row 3

Peoples Gas Storage Inventory

| Month | Volume (Dth) |
|------------------|-----------------|
| September 05 | 51,680,840 |
| October | 57,596,360 |
| November | 58,513,616 |
| December | 49,655,096 |
| January 06 | 42,928,643 |
| February | 31,480,983 |
| March | 25,995,198 |
| April | 28,573,538 |
| May | 34,577,846 |
| June | 40,579,852 |
| July | 46,655,362 |
| August | 51,092,474 |
| September 06 | 54,138,435 |
| Total | 573,468,243 |
| 13-Month Average | 44,112,942 |

Source - Peoples Gas Response to Staff Data Request ENG 1.53

Peoples Gas Historical Inventory Levels

| | Fiscal 2006 | Fiscal 2005 | Fiscal 2004 | Fiscal 2003 | Fiscal 2002 |
|---------------------------------|-------------|-------------|-------------|-------------|-------------|
| September | 51,680,840 | 51,894,379 | 52,868,971 | 43,235,049 | 43,235,049 |
| October | 57,596,360 | 57,281,585 | 58,806,863 | 48,916,296 | 47,383,111 |
| November | 58,513,616 | 60,657,421 | 59,444,900 | 48,639,575 | 48,844,733 |
| December | 49,655,096 | 49,983,851 | 50,359,119 | 37,767,759 | 37,973,609 |
| January | 42,928,643 | 34,456,024 | 33,062,773 | 21,131,416 | 26,017,312 |
| February | 31,480,983 | 25,174,454 | 24,250,134 | 11,297,807 | 12,938,921 |
| March | 25,995,198 | 18,532,175 | 18,447,239 | 11,769,812 | 9,206,119 |
| April | 28,573,538 | 21,516,395 | 19,786,142 | 16,261,341 | 10,081,230 |
| May | 34,577,846 | 28,698,195 | 25,952,269 | 23,689,946 | 15,847,169 |
| June | 40,579,852 | 34,895,327 | 33,716,041 | 30,906,435 | 23,529,941 |
| July | 46,655,362 | 41,643,086 | 39,745,803 | 38,750,485 | 30,263,394 |
| August | 51,092,474 | 47,355,678 | 46,191,418 | 45,693,822 | 36,430,350 |
| September | 54,138,435 | 51,680,840 | 51,894,379 | 52,868,971 | 43,235,049 |
| Total | 573,468,243 | 523,769,410 | 514,526,051 | 430,928,714 | 384,985,987 |
| 13-Month Average | 44,112,942 | 40,289,955 | 39,578,927 | 33,148,363 | 29,614,307 |
| Difference from Test Year | 0 | -3,822,987 | -4,534,015 | -10,964,579 | -14,498,635 |
| Average Fiscal 2004 and 2005 | 39,934,441 | | | | |

Peoples Gas Storage Inventory Valuation

| | |
|------------------|----------------|
| September 05 | \$106,241,551 |
| October | \$168,295,356 |
| November | \$176,345,833 |
| December | \$85,822,052 |
| January 06 | \$19,244,713 |
| February | -\$79,799,132 |
| March | -\$122,874,375 |
| April | -\$98,720,217 |
| May | -\$44,435,826 |
| June | \$8,996,896 |
| July | \$62,318,874 |
| August | \$101,099,232 |
| September 06 | \$127,745,508 |
| 13-Month Average | \$39,252,343 |

(Source: ENG 1.53)

Peoples Gas Schedule F-9 Inventory Levels

| | Fiscal 2006 | Fiscal 2005 | Fiscal 2004 | Fiscal 2003 | Fiscal 2002 |
|-----------|-------------|-------------|-------------|-------------|-------------|
| September | 49,518,000 | 49,043,000 | 49,281,000 | 39,833,000 | 40,756,000 |
| October | 54,639,000 | 54,588,000 | 55,838,000 | 46,076,000 | 45,567,000 |
| November | 58,055,000 | 58,970,000 | 59,126,000 | 48,778,000 | 48,114,000 |
| December | 54,084,000 | 55,321,000 | 54,902,000 | 43,204,000 | 43,409,000 |
| January | 46,292,000 | 42,220,000 | 41,711,000 | 29,450,000 | 31,995,000 |
| February | 37,205,000 | 29,815,000 | 28,656,000 | 16,215,000 | 19,480,000 |
| March | 28,738,000 | 21,853,000 | 21,349,000 | 11,534,000 | 11,074,000 |
| April | 27,284,000 | 20,024,000 | 19,117,000 | 14,016,000 | 9,644,000 |
| May | 31,576,000 | 25,107,000 | 22,869,000 | 19,976,000 | 12,964,000 |
| June | 37,579,000 | 31,797,000 | 29,834,000 | 27,298,000 | 19,689,000 |
| July | 43,618,000 | 38,269,000 | 36,731,000 | 34,828,000 | 26,897,000 |
| August | 48,874,000 | 44,499,000 | 42,969,000 | 42,222,000 | 33,347,000 |
| September | 52,615,000 | 49,518,000 | 49,043,000 | 49,281,000 | 39,833,000 |

Per Section 285.6305, Schedule F-9, Pages 1 through 6

| | | | | | |
|------------------|-------------|-------------|-------------|-------------|-------------|
| Total | 570,077,000 | 521,024,000 | 511,426,000 | 422,711,000 | 382,769,000 |
| 13-Month Average | 43,852,077 | 40,078,769 | 39,340,462 | 32,516,231 | 29,443,769 |
| Schedule 11.3P | | | | | |
| 13-Month Average | 44,112,942 | 40,289,955 | 39,578,927 | 33,148,363 | 29,614,307 |
| Difference | 260,865 | 211,185 | 238,465 | 632,132 | 170,537 |

Peoples Gas Remaining Storage Inventory

| Storage Service | DSS | PGL-NSS | ANR | MANLOVE |
|-------------------------------------|-----------------|------------------|-------------------------|-------------------|
| Maximum Storage Capacity | 10,400,000 | 13,125,000 | 8,000,000 10,000,000 | 24,800,000 |
| September 2005 Percent Remaining | 8,786,490 84 | 9,381,721 71 | 7,665,531 96 | 24,196,816 98 |
| October Percent Remaining | 9,978,016 96 | 10,450,180 80 | 8,683,637 109 | 26,865,289 108 |
| November Percent Remaining | 8,293,021 80 | 11,158,139 85 | 7,984,864 100 | 29,491,071 119 |
| December Percent Remaining | 6,344,223 61 | 9,823,396 75 | 7,654,714 96 | 24,275,718 98 |
| January 06 Percent Remaining | 5,138,444 49 | 11,326,711 86 | 7,566,310 95 | 17,368,564 70 |
| February Percent Remaining | 3,499,009 34 | 11,809,726 90 | 7,045,456 88 | 7,624,100 31 |
| March Percent Remaining | 2,195,130 21 | 11,952,936 91 | 3,902,835 49 | 6,471,500 26 |
| April Percent Remaining | 1,672,089 16 | 10,631,697 81 | 5,100,064 51 | 9,726,158 39 |
| May Percent Remaining | 3,221,439 31 | 10,104,187 77 | 6,380,992 64 | 13,354,321 54 |
| June Percent Remaining | 4,723,320 45 | 10,978,088 84 | 6,445,092 64 | 16,946,444 68 |
| July Percent Remaining | 6,276,321 60 | 10,858,450 83 | 7,100,915 71 | 20,965,275 85 |
| August Percent Remaining | 7,829,525 75 | 10,752,149 82 | 7,012,386 70 | 24,076,521 97 |
| September 06 Percent Remaining | 9,232,541 89 | 10,655,891 81 | 7,606,379 76 | 25,252,984 102 |

Source: ENG 1.53

Note: ANR Leased Storage Capacity Increased to 10 Bcf in April 2006

North Shore Storage Working Capital Adjustment

| | | |
|---|---------------------------|--------------|
| 1 | Requested Storage Volume | 6,399,318 |
| 2 | Requested Storage Value | \$10,507,000 |
| 3 | Price per Dth for Storage | 1.64 |
| 4 | Historical Average Volume | 5,497,047 |
| 5 | Volume Difference | 902,271 |
| 6 | Adjustment | \$1,481,433 |

Row 1 = ICC Staff Exhibit 11.0, Schedule 11.2P
Row 2 = 285.2005, Schedule B-1, Line 6, Column F
Row 3 = Row 2 / Row 1
Row 4 = ICC Staff Exhibit 11.0, Schedule 11.3N
Row 5 = Row 1 - Row 4
Row 6 = Row 5 * Row 3

North Shore Storage Inventory

| Month | Volume (Dth) |
|------------------|-----------------|
| September 05 | 8,416,554 |
| October | 9,649,103 |
| November | 8,993,930 |
| December | 7,561,785 |
| January 06 | 6,201,735 |
| February | 3,859,396 |
| March | 2,578,969 |
| April | 2,942,147 |
| May | 3,894,804 |
| June | 5,208,020 |
| July | 6,580,873 |
| August | 8,003,936 |
| September 06 | 9,299,879 |
| Total | 83,191,131 |
| 13-Month Average | 6,399,318 |

Source - North Shore Response to Staff Data Request ENG 3.36

North Shore Historical Inventory Levels

| | Fiscal 2006 | Fiscal 2005 | Fiscal 2004 | Fiscal 2003 | Fiscal 2002 |
|--|-------------|-------------|-------------|-------------|-------------|
| September | 8,416,554 | 8,532,348 | 7,568,211 | 7,585,914 | 7,577,063 |
| October | 9,649,103 | 9,607,713 | 9,113,158 | 8,865,721 | 9,084,909 |
| November | 8,993,930 | 9,921,765 | 9,239,656 | 8,382,449 | 9,211,789 |
| December | 7,561,785 | 7,833,297 | 7,361,419 | 6,856,074 | 7,739,903 |
| January | 6,201,735 | 4,848,652 | 4,216,461 | 3,674,992 | 5,716,515 |
| February | 3,859,396 | 2,971,880 | 2,522,418 | 1,683,040 | 3,815,872 |
| March | 2,578,969 | 1,244,709 | 1,452,999 | 669,045 | 2,309,678 |
| April | 2,942,147 | 1,803,767 | 2,256,232 | 1,112,345 | 2,587,830 |
| May | 3,894,804 | 2,886,029 | 3,154,725 | 2,054,783 | 3,516,348 |
| June | 5,208,020 | 4,221,073 | 4,511,246 | 3,277,734 | 4,482,667 |
| July | 6,580,873 | 5,665,768 | 5,825,191 | 4,587,619 | 5,513,910 |
| August | 8,003,936 | 7,030,038 | 7,181,390 | 6,046,122 | 6,420,954 |
| September | 9,299,879 | 8,416,554 | 8,532,348 | 7,568,211 | 7,585,914 |
| Total | 83,191,131 | 74,983,593 | 72,935,454 | 62,364,049 | 75,563,352 |
| 13-Month Average | 6,399,318 | 5,767,969 | 5,610,420 | 4,797,235 | 5,812,566 |
| Difference from Test Year | 0 | -631,349 | -788,898 | -1,602,083 | -586,752 |
| Historical Average Fiscal 2002-2005 | 5,497,047 | | | | |

North Shore Storage Inventory Valuation

| | |
|------------------|---------------|
| September 05 | \$13,596,425 |
| October | \$26,464,237 |
| November | \$19,422,149 |
| December | \$5,048,735 |
| January 06 | -\$8,219,542 |
| February | -\$27,919,284 |
| March | -\$37,540,819 |
| April | -\$33,866,684 |
| May | -\$24,838,450 |
| June | -\$13,451,517 |
| July | -\$1,768,225 |
| August | \$10,113,929 |
| September 06 | \$21,157,687 |
| 13-Month Average | -\$3,984,720 |

(Source: ENG 3.36)

North Shore Schedule F-9 Inventory Levels

| | Fiscal 2006 | Fiscal 2005 | Fiscal 2004 | Fiscal 2003 | Fiscal 2002 |
|-----------|-------------|-------------|-------------|-------------|-------------|
| September | 7,723,000 | 7,857,000 | 6,807,000 | 7,003,000 | 6,958,000 |
| October | 9,033,000 | 9,070,000 | 8,341,000 | 8,226,000 | 8,332,000 |
| November | 9,322,000 | 9,765,000 | 9,176,000 | 8,624,000 | 9,148,000 |
| December | 8,278,000 | 8,878,000 | 8,301,000 | 7,619,000 | 8,476,000 |
| January | 6,882,000 | 6,341,000 | 5,789,000 | 5,266,000 | 6,728,000 |
| February | 5,031,000 | 3,910,000 | 3,369,000 | 2,679,000 | 4,766,000 |
| March | 3,219,000 | 2,108,000 | 1,988,000 | 1,176,000 | 3,063,000 |
| April | 2,761,000 | 1,524,000 | 1,855,000 | 891,000 | 2,449,000 |
| May | 3,418,000 | 2,345,000 | 2,705,000 | 1,584,000 | 3,052,000 |
| June | 4,551,000 | 3,554,000 | 3,833,000 | 2,666,000 | 4,000,000 |
| July | 5,894,000 | 4,943,000 | 5,168,000 | 3,933,000 | 4,998,000 |
| August | 7,292,000 | 6,348,000 | 6,503,000 | 5,317,000 | 5,967,000 |
| September | 8,652,000 | 7,723,000 | 7,857,000 | 6,807,000 | 7,003,000 |

Per Section 285.6305, Schedule F-9, Pages 1 through 6

| | | | | | |
|------------------------------------|------------|------------|------------|------------|------------|
| Total | 82,056,000 | 74,366,000 | 71,692,000 | 61,791,000 | 74,940,000 |
| 13-Month Average | 6,312,000 | 5,720,462 | 5,514,769 | 4,753,154 | 5,764,615 |
| Schedule 11.3N 13-Month Average | 6,399,318 | 5,767,969 | 5,610,420 | 4,797,235 | 5,812,566 |
| Difference | 87,318 | 47,507 | 95,650 | 44,081 | 47,950 |